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## Equivalency Analysis

The BellSouth simple resale product list was divided into groups based on similar functionality or technology. These groups, or equivalency classes, are:

1. Basic Class of Service
2. BellSouth Custom Calling Services
3. BellSouth TouchStar® Services
4. Integrated Packages

In each of the following sections, the specific products and services in each equivalency class are identified and those selected for the Test are highlighted.

### 1. Basic Class Of Service Equivalency Class

Basic Classes of Service are codes that group services for rate incentives and/or discounts. The BellSouth simple resale product list includes the following Basic Classes of Service:

- Flat Rate Residence
- Measured Rate Residence
- Flat Rate/Basic Local Exchange
- Measured Rate Business
- Touchtone
- Optional Calling Plan (OCP)
- Georgia Community Plan
- Message Telephone Service (MTS)
- Area Plus<sup>9</sup> with Complete Choice<sup>10</sup>
- Complete Choice<sup>11</sup>
- Area Plus<sup>12</sup>
- Visual Director<sup>13</sup>

The Test selected representative offerings from the flat rate services, measured rate services, extended calling area and calling plans for both business and residential customers for inclusion.

The following table highlights the services that the Test product list selected and how each represent both flat and measured rates for residential and business customers.

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<sup>9</sup> Area Plus®, Area Plus® with Complete Choice®, Complete Choice® and Visual Director® are listed in both the Basic Class of Service and Integrated Package equivalency classes due to their functionality.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid..

<i>Basic Class of Service</i>	<i>Rate</i>		<i>Cust Type</i>		<i>USOC</i>
	<i>Flat</i>	<i>Meas</i>	<i>Res</i>	<i>Bus</i>	
Flat rate line with Touchtone, residence	X		X		14R
Flat rate line, business, two way	X			X	1FB
Measured rate line, residence, two-way, non-hunting		X	X		1MS
Measured rate line, business		X		X	B1M
Area Plus <sup>®</sup> Service, residence	X		X		VR1
Area Plus <sup>®</sup> with Complete Choice <sup>®</sup>	X		X		VR4, ACO
Complete Choice <sup>®</sup> Service, individual line	X		X		VR3, VR0
Business Plus Service, option 1, flat rate plan	X			X	BG1 (GA)

*Figure A - III: Basic Class of Service*

## 2. BellSouth Custom Calling Services Equivalency Class

Custom Calling Services is a group of features available from the central office switching system which offers benefits without adding telephone customer premise equipment. BellSouth offers the following Custom Calling Services on a resale basis:

- Call Forwarding Busy Line
- Customer Controlled Call Forward Busy Line
- Call Forwarding Multipath
- Call Forwarding Multiple Simultaneous
- Call Forwarding Don't Answer
- Customer Controlled Call Forwarding Don't Answer
- Call Forwarding Don't Answer - Ring Control
- Call Forwarding Variable
- Remote Access - Call Forwarding
- Call Waiting
- Call Waiting Deluxe
- Speed Calling
- Three Way Calling
- Flexible Call Forwarding
- Flexible Call Forwarding Plus

Of these Custom Calling Services, the Test will use

- Call Waiting,
- Three Way Calling,
- Call Forwarding Variable, and
- Speed Calling.

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These services were selected based on IDC research considered in an effort to create the most representative product list for a CLEC. In an August 1998 report<sup>14</sup> of residential telecommunications customers, these were reported to be the most widely popular features.

### **3. TouchStar® Equivalency Class**

TouchStar® service is a BellSouth grouping of central office Call Management features that are offered in addition to basic telephone service. Most TouchStar® features fall under the CLASS category. CLASS is an industry acronym for Custom Local Area Signaling Services. TouchStar® service includes:

- Call Return
- Repeat Dialing
- Call Selector
- Preferred Call Forwarding
- Call Block (incoming calls)
- Call Tracing
- Caller ID - Basic
- Caller ID - Deluxe
- Calling Number Delivery Blocking - Permanent
- Anonymous Call Rejection
- Call Tracking - Bulk Calling Line Identification
- Enhanced Caller ID (Busy Line and Idle Line Name and Number Delivery)
- Enhanced Caller ID with Call Management

Of the TouchStar® features, the Test will use

- Caller ID,
- Call Return, and
- Call Selector (Distinctive Ringing)

Caller ID, Call Return, and Call Selector have been selected because they are popular features supported by Advanced Intelligent Networks (AIN) which vary from an ordering and functional perspective.

### **4. Integrated Package Equivalency Class**

BellSouth offers the following integrated packages for resale:

- Area Plus®
- Area Plus® with Complete Choice®

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<sup>14</sup> There's No Place Like Home: 1998 U.S. Residential Telecommunications Survey, IDC Report, August 1998

- 
- Complete Choice®
  - Visual Director®

The Test will incorporate Area Plus®, Area Plus® with Complete Choice® and Complete Choice® into the Test List as integrated packages. Visual Director® is not available in all BellSouth states, so we have chosen the universally available Area Plus® and Complete Choice® packages as the most appropriate representative packages.

## Appendix B-1

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# **Appendix B1: Pre-Ordering Scenarios**

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## Pre-Ordering Scenarios

### *A. Primary Categories*

Pre-Ordering Scenarios were generated by applying BellSouth's OSS electronic ordering business rules, and logical business requirements across the following primary categories:

<b><i>Primary Categories</i></b>	<b><i>Definition</i></b>
Pre-Ordering Transaction Types	The type of pre-ordering transaction
Customer Types	The type of end user account linked to an order.

*Figure B1 - I: Pre-Ordering Scenario Coverage*

### **1. Pre-Ordering Transaction Types**

Figure B1 - II lists the individual pre-ordering transaction types per Telecommunication Access Gateway Training - Release 2.1.

<b><i>Pre-Ordering Transaction Types</i></b>
Service Availability
Address Validation
Telephone Number Assignment
Customer Record
Appointment Availability

*Figure B1 - II: Pre-Ordering Transaction Types*

### **2. Customer Type**

The Customer Type category addresses only business and residential end users. The Master Test Plan excludes government..

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## ***B. Test Case Definition (Secondary Requirements)***

Additional requirements or variables will be introduced below the Test Scenario level in order to define individual Test Cases. These secondary categories include:

<b><i>Secondary Categories</i></b>	<b><i>Definition</i></b>
Query Criteria	Specific fields used for querying.
Sub Menus	Menus contained within transaction types.
Test Errors	Errors used to test TAG response functionality
TAG Responses	Messages generated by the TAG interface in response to particular transactions

*Figure B1 - III: Pre-Ordering Test Case Coverage*

### **1. Query Criteria**

For many functions, the user may query for a piece of information in several ways. For example, to validate an address, the user may query either by telephone number or by address. This distinction merits unique test cases.

### **2. Sub Menus**

The functions listed at the scenario level are at a high level and often include several sub-options. These sub-options translate into individual test cases. For example, within the telephone number reservation function there are several options that each need to be tested. These options include: "None," "Easy," "Sequential," "Ascending Line Digits," "Descending Line Digits," and "Identical Line Digit." The Telephone Assignment function also includes sub menus. The user may reserve, extend and/or cancel a telephone reservation for either a Telephone Number, Direct-in-Dial and Multi-line Hunt number. Combinations of these variables will form multiple test cases.

### **3. Test Errors**

Errors will be introduced into the testing process to ensure that the TAG interface handles errors properly. For every error that will occur, there must be two test cycles: one to test that the particular function works correctly and the other to test that error handling and response works properly.

### **4. TAG Responses**

In many cases, TAG has the ability to respond with different messages based on user input. Test cases will test each response to ensure that they function properly. Address



validation, for example, responds to the user query with one of thirteen messages. Each message must be tested, thereby creating thirteen additional test cases.

### C. Pre-Ordering Coverage Matrix

The following table illustrates coverage of the pre- ordering scenarios along the two primary categories described above.

Scen #	Scenario Description	Pre-Order Transaction Type						Customer Type		
		Service Availability	Address Validation	TN Assignment	Customer Record	Apptmt Availability	Due Date Calculation	Bus	Res	UNE
101	Address validation		X					X	X	X
102	CSR Inquiry for CLEC residential customer				X			X		X
103	CSR Inquiry for small CLEC business customer				X				X	X
104	Deferred CSR Inquiry for a large CLEC business customer				X				X	X
105	CSR Inquiry for BellSouth residential customer who is a potential CLEC customer				X			X		X
106	CSR Inquiry for small BellSouth business customer who is a potential CLEC customer				X				X	X
107	Deferred CSR Inquiry for a large BellSouth business customer who is a potential CLEC customer				X				X	X
108	Feature availability lookup	X						X	X	X (port)
109	Appointment Availability					X	X	X	X	X (loop-port combo)
110	TN Inquiry			X				X	X	X (port)
111	Reserve, extend and cancel TN			X				X	X	X (port)
112	Available PIC Inquiry	X						X	X	X
113	Due Date Calculation						X	X	X	X

Figure B1 - IV: Pre-Ordering Coverage Matrix

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#### ***D. Pre-Ordering Scenario Descriptions***

The following list is a summarization of the pre-ordering scenarios.

<b><i>Scenario #</i></b>	<b><i>Pre-Ordering Scenario Description</i></b>
101	Address validation
102	CSR Inquiry for CLEC residential customer
103	CSR Inquiry for small CLEC business customer
104	Deferred CSR Inquiry for a large CLEC business customer
105	CSR Inquiry for BellSouth residential customer who is a potential CLEC customer
106	CSR Inquiry for small BellSouth business customer who is a potential CLEC customer
107	Deferred CSR Inquiry for a large BellSouth business customer who is a potential CLEC customer
108	Feature availability lookup
109	Appointment Availability
110	TN Inquiry
111	Reserve, extend and cancel TN
112	Available PIC Inquiry
113	Due Date Calculation

*Figure B1 - V: Pre-Ordering Scenario Descriptions*

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**Scenario #101: Address validation.**

**Scenario Description:**

This pre-ordering scenario will test the ability of CLEC to validate customer's address.

Address validation will be queried by either the TN or address.

Test cases will include variations of customer type (Business, Residential, UNE) query criteria (TN or address), address validation response messages (thirteen options) and "resend" orders.

**Network Configuration:**

NA

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**Scenario #102: CSR Inquiry for CLEC residential customer.**

***Scenario Description:***

CLEC residential customer inquires about information on their Customer Service Request.

This scenario will generate multiple test cases based on customer type (Resale, UNE) desired information (billing or services) and query criteria (TN (Resale, Loop and Port Combo), Circuit ID and State code (SL2 UNE) or Miscellaneous Account Number (SL Loop)).

***Network Configuration:***

NA

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**Scenario #103: CSR Inquiry for small CLEC business customer.**

***Scenario Description:***

A small CLEC customer inquires about information on their Customer Service Request.

This scenario will generate multiple test cases based on customer type (Resale, UNE) desired information (billing or services) and query criteria (TN (Resale, Loop and Port Combo), Circuit ID and State code (SL2 UNE) or Miscellaneous Account Number (SL Loop)).

***Network Configuration:***

NA

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**Scenario #104: Deferred CSR Inquiry for a large CLEC business customer.**

**Scenario Description:**

A large CLEC customer inquires about information on their Customer Service Request. This is a deferred CSR inquiry for a large business.

This scenario will generate multiple test cases based on customer type (Resale, UNE) desired information (billing or services) and query criteria (TN (Resale, Loop and Port Combo), Circuit ID and State code (SL2 UNE) or Miscellaneous Account Number (SL Loop)).

**Network Configuration:**

NA

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**Scenario #105: CSR Inquiry for BellSouth residential customer who is a potential CLEC customer.**

***Scenario Description:***

BellSouth residential customer wants to switch from BellSouth to CLEC. After obtaining authorization, CLEC rep queries TAG for potential customer's service at BellSouth.

This scenario will generate multiple test cases based on customer type (Resale, UNE) desired information (billing or services) and query criteria (TN (Resale, Loop and Port Combo), Circuit ID and State code (SL2 UNE) or Miscellaneous Account Number (SL Loop)).

***Network Configuration:***

NA

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**Scenario #106: CSR Inquiry for small BellSouth business customer who is a potential CLEC customer.**

**Scenario Description:**

Small BellSouth business customer wants to switch from BellSouth to CLEC. After obtaining authorization, CLEC rep queries TAG for potential customer's service at BellSouth.

This scenario will generate multiple test cases based on customer type (Resale, UNE) desired information (billing or services) and query criteria (TN (Resale, Loop and Port Combo), Circuit ID and State code (SL2 UNE) or Miscellaneous Account Number (SL Loop)).

**Network Configuration:**

NA



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**Scenario #107: CSR Inquiry for a large BellSouth business customer who is a potential CLEC customer.**

**Scenario Description:**

Large BellSouth business customer wants to switch from BellSouth to CLEC. After obtaining authorization, CLEC rep queries TAG for potential customer's service at BellSouth.

This scenario will generate multiple test cases based on customer type (Resale, UNE) desired information (billing or services) and query criteria (TN (Resale, Loop and Port Combo), Circuit ID and State code (SL2 UNE) or Miscellaneous Account Number (SL Loop)).

**Network Configuration:**

NA

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**Scenario #108: Feature availability lookup.**

**Scenario Description:**

This scenario will test the ability of CLEC to lookup the feature availability on particular LEC switches during the pre-order process.

Service availability will be queried for by NPA-NXX, CLLI and PIC Service Offerings.

This scenario will generate multiple test cases based on customer type (Business, Residential, UNE), NPA-NXX, CLLI and PIC Service Offerings.

**Network Configuration:**

NA

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**Scenario #109: Appointment Availability.**

***Scenario Description:***

This pre-ordering scenario will test the ability of CLEC to view BellSouth's Central Office and Installation and Maintenance Calendars.

Appointment availability will be request by NPA-NXX. Response will include weekday availability, install intervals and scheduled holiday and close out dates.

This scenario will generate multiple test cases based on customer type (Business, Residential, UNE) and product type.

***Network Configuration:***

NA

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**Scenario #110: TN Inquiry.**

**Scenario Description:**

A potential CLEC customer inquires about the availability of a vanity TN.

This scenario will generate multiple test cases based on customer type (Business, Residential, UNE), product type (simple resale line, DID, or Multiline Hunt) and TN option values (Random, Specific Number, Vanity Number, Easy, Sequential Line, Ascending Line Digits, Descending Line Digits, Identical Line Digits, Exception Numbers).

**Network Configuration:**

NA

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**Scenario #111: Reserve, extend and cancel TN.**

**Scenario Description:**

This scenario will test the ability of CLEC to reserve, extend and release telephone numbers during pre-order negotiations.

This scenario will generate multiple test cases based on customer type (Business, Residential, UNE), product type (telephone line, DID, or Multiline Hunt), cancellation or extend options, and TN option values (Random, Specific Number, Vanity Number, Easy, Sequential Line, Ascending Line Digits, Descending Line Digits, Identical Line Digits, Exception Numbers).

**Network Configuration:**

NA

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**Scenario #112: Available PIC Inquiry.**

***Scenario Description:***

This pre-ordering scenario will test the ability of CLEC to query for PICs. CLECs need to know which Interexchange Carriers are accessible from the customer's central office.

This scenario will generate multiple test cases based on customer type (Business, Residential, UNE).

***Network Configuration:***

NA

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**Scenario #113: Due Date Calculation.**

***Scenario Description:***

This pre-ordering scenario will test due date calculation for new products & services.

This scenario will generate multiple test cases based on customer type (Business, Residential, UNE) and product type.

***Network Configuration:***

NA





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## **Appendix B2: Resale Ordering Scenarios**

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## Resale Ordering Scenarios

### *A. Primary Categories*

Resale Ordering Scenarios were generated by applying BellSouth's OSS electronic ordering business rules and logical business requirements across the following primary categories:

<b><i>Primary Categories</i></b>	<b><i>Definition</i></b>
1. Products and Services	The resale products being ordered, configured, or operated upon by the CLEC.
2. Activity Types	The valid account level Activity Types (ACT) for the Requisition Type (REQTYP) of the different resale products being ordered. <sup>1</sup> The Activity Type also defines the initial and final LSP for the transaction.
3. Customer Types	The type of end user account linked to an order. Customer Type is defined by the first character of the Type of Service (TOS) data element. <sup>2</sup>
4. Flow-Through	A determination of whether or not an electronically submitted order will be processed by BellSouth's OSS without manual intervention through return of FOC.

*Figure B2 - I: Resale Ordering Scenario Coverage*

### **1. Products and Services**

Figure B2 - II lists the individual resale products covered in the Test as a result of the Product Selection analysis described in Appendix A of this MTP.

<b><i>Resale Products</i></b>
Simple Resale
Analog PBX Trunk
ISDN-BRI
Hunting
Synchronet

*Figure B2 - II: Resale Products*

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<sup>1</sup> LEO Implementation Guide – Volume 1, Issue 7F, March, 1999.